The Seattle Fire Department is proposing the draft language shown below for a proposed new Chapter 94 to the 2003 Seattle Fire Code. The proposed new chapter pertains to fire protection in marinas with existing covered boat moorage. Any additions to the Seattle Fire Code require legislation approved by the Mayor and the Seattle City Council.

Newly constructed covered boat moorage is already required to have fire sprinklers under the current Seattle Fire Code. Those marinas without covered boat moorage would not be affected by the proposal.

Chapter 94 - Marina Fire Protection

SECTION 9401 – GENERAL

9401.1 Scope. This Chapter shall apply to all marinas with covered boat moorage in existence at the time of its adoption.

Exception: Approved designated facilities and shipyards in accordance with Administrative Rule 26.02.04 *Designated Hot Work Facilities and Shipyards*.

- **9401.1.1 Conflicts.** Where there is a conflict between an ordinance or code and the provisions of this Chapter, this Chapter shall govern unless the ordinance or code establishes more stringent fire and life safety requirements.
- **9401.2 Signage.** At the shore end of piers, wharves and floats conspicuous signage shall be located indicating the address and, for those structures that are designed to support vehicles, the weight limit. Numbers and letters shall be easily legible and have high contrast with the color of the sign background. Numbers and letters shall not be less than 5 inches (127 mm) in height.
- **9401.2.1 Labeling electrical shutoffs.** Electrical transformers, control panels, and breaker panels shall be readily accessible, clearly labeled and indicate the areas they service. See also SFC 605.3.
- **9401.3 Fire extinguishers.** One portable fire extinguisher having a minimum rating of 2A 20-BC, shall be provided within 75 feet of all portions of piers, wharves, and floats, or at each required hose station. Additional fire extinguishers, suitable for the hazards involved, shall be provided and maintained in accordance with SFC 906 and NFPA Standard 10.
- **9401.4 Emergency Plan.** Owners of piers, wharves, floats and marinas shall prepare an emergency plan for the facility. The plan shall include procedures for fire department notification, fire evacuation, and include location of portable fire extinguishers and hose cabinets, sprinkler and standpipe system control valves, fire department connections and electrical disconnects.

Point of Information

For examples of emergency plans, see information bulletins located at www.seattle.gov/fire titled Emergency Procedures for Public Occupancies and Fire Evacuation Planning.

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9401.5 Definitions.

9401.5.1 Limited application. For the purpose of this Chapter, certain terms are defined as follows:

COVERED BOAT MOORAGE is a pier or system of floating or fixed accessways to which vessels on water may be secured and is covered by a roof.

FLOAT is a floating structure normally used as a point of transfer for passengers and goods, or both, for mooring purposes. Ref: UFC Appendix II-C

MARINA is any portion of the ocean or inland water, either naturally or artificially protected, for the mooring, servicing or safety of vessels and shall include artificially protected works, the public or private lands ashore, and structures or facilities provided within the enclosed body of water and ashore for the mooring or servicing of vessels or the servicing of their crews or passengers.

PIER is a structure, usually of greater length than width, of timber, stone, concrete or other material, having a deck and projecting from the shore into waters so that vessels may be moored alongside for loading, unloading, storage, repairs or commercial uses.

SHIPYARD is a pier, wharf, or series of piers and related onshore facilities, designated by the fire code official, which by virtue of the pier construction, location, emergency vehicle access, fire protection, hydrant availability and onsite safety personnel in accordance with Seattle Fire Department Administrative Rule 26.02.02, *Designated Hot Work Facilities and Shipyards* is suitable to permit repairs, including major conversions, on marine vessels of any length.

VESSEL is watercraft of any type, other than seaplanes on the water, used or capable of being used as a means of transportation.

WHARF OR QUAY is a structure of timber, stone, concrete or other material having a platform built along and parallel to waters so that vessels may be moored alongside for loading, unloading, storage, repairs or commercial uses.

9402 - PLANS AND APPROVALS

9402.1 Plans. Plans for marina fire-protection shall be approved prior to installation. The work shall be subject to final inspection and approval after installation.

9403 - ACCESS AND WATER SUPPLY

9403.1 Fire department access. Fire department apparatus access lanes, not less than 20 feet wide and capable of supporting a 50,000-pound vehicle or 24,000 pounds per axle (HS20 loading), shall be provided and so located as to provide fire department apparatus access to within 150 feet travel distance to the shore end of all marina piers, wharves, and floats.

Exception: When approved by the fire code official a Class III standpipe system may be installed on piers, wharves, or floats when conditions are such that providing fire department access lanes to within 150 feet to the shore end of the piers, wharves, and floats is not practical.

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9403.2 Fire hydrants. At least two fire hydrants shall be provided. One hydrant shall be located within 500 feet of the closest point of fire department apparatus access to the shore end of the marina piers, wharves or floats, or to the fire department connection (FDC) for those piers, wharves or floats that are equipped with standpipes. The second fire hydrant shall be located within 1000 feet of the closest point of fire department apparatus access to the shore end of the marina piers, wharves, or floats, or to the FDC for those piers, wharves or floats that are equipped with standpipes.

All required hydrants shall be capable of delivering not less that 1,000 gpm at a minimum residual pressure of 20 psi each.

Exception: The requirements for fire hydrants may be modified when alternate arrangements are approved by the fire code official.

SECTION 9404 - FIRE PROTECTION EQUIPMENT

9404.1 Standpipe systems. Class III standpipe systems in accordance with NFPA 14 shall be provided for piers, wharves, and floats where the hose lay distance from the fire apparatus to the most remote accessible portion of the pier, wharf or float exceeds 150 feet. Piping shall be 6-inch minimum, with 4-inch minimum piping acceptable for the last 100 feet. Approved plastic pipe may be used when installed underwater, or other approved method of protection from fire is provided. Note: Separate Class I and Class II standpipes may be installed in lieu of the combined Class III type standpipe system.

9404.1.1 Hose stations. Hose stations on required standpipes shall be provided at spacing not to exceed 100 feet with the first hose station located as close as practicable to the land end of the pier. Each hose station shall have 100 feet of 1½-inch hose mounted on a reel or rack and enclosed within an approved cabinet. A valved 2½-inch fire department hose outlet shall be provided at each hose station. Outlet caps shall have a 1/8-inch predrilled hole for pressure relief and be secured with a short length of chain or cable to prevent falling after removal. Listed equipment shall be used. Hose stations shall be labeled FIRE HOSE-EMERGENCY USE ONLY.

9404.1.2 Freeze protection. Standpipe systems shall be maintained dry when subject to freezing temperatures, and always from November 1 through March 31. The 1½-inch hose stations shall be tagged out-of service when the system is drained. The main water supply control valve shall be readily accessible and clearly labeled so that the system may be quickly restored to full service during periods when the system is drained down.

Exception: Other methods of freeze protection may be provided when approved by the fire code official, such as listed freeze valves.

9404.2 Automatic sprinkler systems. Automatic sprinklers shall be provided for covered boat moorage exceeding 500-sq. ft. in projected roof area per pier, wharf or float. Ref: NFPA 303

The sprinkler system shall be designed and installed in accordance with NFPA 13 for Extra Hazard Group 2 occupancy.

If sprinklers are required by this Chapter, they shall be extended to any structure on the pier exceeding 500 square feet in projected roof area.

- **9404.2.1 Monitoring.** Sprinkler systems shall be monitored by an approved Central Station.
- **9404.3 Fire department connections.** Standpipe and sprinkler systems shall be equipped with not less than a two-way 2½-inch fire department connection (FDC), which shall be readily visible and located at the fire department apparatus access. See also 9403.2 Fire hydrants.
- **9404.4 Marina fire protection confidence testing.** Standpipe and sprinkler systems shall be inspected and tested at least annually. Reports of inspections and tests shall be submitted to the Seattle Fire Department Confidence Testing Unit in accordance with Administrative Rule 9.02.04 *Confidence Test Requirements for Life Safety Systems*. Maintenance and periodic testing are the owner's responsibility, or the responsibility of such other person as may be designated, and are separate from fire department inspections. The person, firm or corporation performing such work shall have a certificate from the fire department. See Administrative Rule 9.01.04 *Certification for Installing, Maintaining and Testing Life Safety Systems and Equipment.*

Section 9405 - Compliance

- **9405.1 Compliance.** All corrections that may be necessary to provide the minimum fire safety requirements established in this Chapter shall be completed by the owners as follows:
 - (a) The fire code official shall develop a procedure for surveying marinas to effect compliance with this Chapter. The fire code official shall send written and signed notices to the owners of all non-complying marinas. Within 120 days of the date of notification by the fire code official. The owner shall submit to the fire code official a concept design and firm schedule for complying with the requirements of this Chapter.
 - (b) The fire code official shall review the concept design and firm schedule and respond in writing. The time schedule for compliance shall be measured from the date of the fire code official's response to the concept design and firm schedule for each building, and shall not exceed the time limits set forth in subsection (c) of this section.
 - (c) The time limits for complying with the requirements of this Chapter are as follows:

Fire Hydrants	3 years
Standpipes	3 years
Sprinkler Systems	3 years
Fire Extinguishers	1 year
Signage	1year
Emergency Plan	1 year

All items must be completed on or before

(d) Marinas will not be deemed to be in violation of this Chapter until the time limits set forth in subsection (c) above have expired.

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